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| APPLICATION NO.    | FILING   | DATE       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------|----------|------------|----------------------|---------------------|------------------|
| 10/563,166         | 04/06    | /2006      | Chiaki Hidai         | 11711-001-999       | 8550             |
| 20583<br>JONES DAY | 7590     | 01/30/2008 |                      | EXAMINER            |                  |
| 222 EAST 41ST ST   |          |            | HADDAD, MAHER M      |                     |                  |
| NEW YORK,          | NY 10017 |            | ART UNIT             | PAPER NUMBER        |                  |
|                    |          |            |                      | 1644                |                  |
|                    | ٠        |            |                      |                     |                  |
|                    |          |            |                      | MAIL DATE           | DELIVERY MODE    |
|                    |          |            |                      | 01/30/2008          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  |   | Application No.   | Applicant(s)                   |  |  |  |  |  |
|--|---|---|--------------------------------|--|--|--|--|--|
| Office Action Summary  |   | 10/563,166  | HIDAI, CHIAKI                  |  |  |  |  |  |
|  |   | Examiner  | Art Unit                       |  |  |  |  |  |
|  |   | Maher M. Haddad   | 1644                           |  |  |  |  |  |
|  | The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |   |                                |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |   |                                |  |  |  |  |  |
| Status   |   |   |                                |  |  |  |  |  |
| 1)   | Responsive to communication(s) filed on   | ·<br>_•   |                                |  |  |  |  |  |
| 2a)  | This action is <b>FINAL</b> . 2b)⊠ This   | action is non-final.  |                                |  |  |  |  |  |
| 3)   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |                                |  |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |   |   |                                |  |  |  |  |  |
| Disposition of Claims  |   |   |                                |  |  |  |  |  |
| 5)<br>6)<br>7)   | Claim(s) 1-27 is/are pending in the application.  4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed.  Claim(s) is/are rejected.  Claim(s) is/are objected to.  Claim(s) 1-27 are subject to restriction and/or expressions.               |   |                                |  |  |  |  |  |
| Applicati  | on Papers   | •   |                                |  |  |  |  |  |
| 10)  | The specification is objected to by the Examiner The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correcti The oath or declaration is objected to by the Example. | epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj | ected to. See 37 CFR 1.121(d). |  |  |  |  |  |
| Priority u   | inder 35 U.S.C. § 119   |   |                                |  |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>   |   |   |                                |  |  |  |  |  |
| Attachment   | • •   |   | •                              |  |  |  |  |  |
|  | e of References Cited (PTO-892)<br>e of Draftsperson's Patent Drawing Review (PTO-948)  | 4) Interview Summary Paper No(s)/Mail Da  |                                |  |  |  |  |  |
| 3) 🔲 Inform  | nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date  | 5) Notice of Informal Pa  |                                |  |  |  |  |  |

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## **DETAILED ACTION**

## Election/Restrictions

- 1. Restriction is required under 35 U.S.C. 121 and 372. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.
- 2. In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.
  - I. Claims 1-3 and 14-16, drawn to a protein, a reagent, a fusion protein or a drug comprising SEQ ID NOS: 6, 8, 10, 12, 14, 18 or 24.
  - II. Claims 4-12, 17-20, drawn to a gene encoding SEQ ID NOS: 6, 8, 10, 12, 14, 18 or 24 vectors, a transformant and a method of producing.
  - III. Claim 13, drawn to a method of identifying a site in extracellular matrix at which the protein comprising SEQ ID NOS: 6, 8, 10, 12, 14, 18 or 24 deposits, comprising reacting said protein with extracellular matrix.
  - IV. Claims 21-23, drawn to a method of recovering a molecule of interest, comprising allowing the fusion protein comprising SEQ ID NOS: 6, 8, 10, 12, 14, 18 or 24 to deposit onto extracellular matrix and collecting the molecule of interest.
  - V. Claims 24-27, drawn to a method of regulating deposition activity onto extracellular matrix, comprising reacting a fragment within the amino acid sequence as shown in SEQ ID NO: 2 comprising an active center region and a positive regulation region and/or a fragment within the amino acid sequence as shown in SEQ ID NO: 2 comprising an active center region and a negative regulation region with extracellular matrix
- 2. The inventions listed as Groups I-V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The invention of Group I was found to have no special technical feature that defined the contribution over the prior art of US Pat. No. 6,812,339 (see entire document).

The `562 patent teaches a 448 amino acid sequence (patented SEQ ID NO: 10130) which comprises the amino acid sequence of SEQ ID NO: 24 at positions 91-316 (see patented SEQ ID O: 10130 in particular).

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Since Applicant's inventions do not contribute a special technical feature when viewed over the prior art they do not have a single general inventive concept and so lack unity of invention.

## Species Election

- 3. Irrespective of whichever group applicant may elect, applicant is further required under 35 US 121 (1) to elect a single disclosed species to which claims would be restricted if no generic claim is finally held to be allowable and (2) to list all claims readable thereon including those subsequently added.
  - A. If anyone of Groups I-IV is elected, applicant is required to a single specific SEQ ID NO, such as a) SEQ ID NO: 6, b) SEQ ID NO: 8, c) SEQ ID NO:10, d) SEQ ID NO:12, e) SEQ ID NO: 14, f) SEQ ID NO:18 or g) SEQ ID NO: 24. These sequences are distinct species because their structures and modes of action are different which, in turn, address different therapeutic endpoints.
- 4. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete <u>must</u> include (i) an election of a species to be examined even though the requirement <u>may</u> be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species.

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Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

- 5. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.
- 6. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maher Haddad whose telephone number is (571) 272-0845. The examiner can normally be reached Monday through Friday from 7:30 am to 4:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen B. O'Hara can be reached on (571) 272-0878. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 24, 2008

Maher Haddad, Ph.D.
Primary Patent Examiner

Technology Center 1600